

STATE OF MAINE
PUBLIC UTILITIES COMMISSION

June 22, 2011

ORDER (PART II)

ELISA BOXER-COOK, ET AL,
Request for Commission Investigation in
Pursuing the Smart Meter Initiative

Docket No. 2010-345

TERESA SWINBOURNE, ET AL.,
Request for Commission Investigation into
Unreasonable, Insufficient and
Discriminatory Decisions to Implement the
use of Smart Meters to CMP Customers
Disregarding Choice in Regards to
Wireless Activity and Consumer's Right to
Privacy Within Their Homes

Docket No. 2010-389

SUZANNE A FOLEY-FERGUSON, ET AL,
Request for Commission Investigation Into
Advanced Metering Infrastructure In
Accordance with the Legislature

Docket No. 2010-398

STEPHEN & DIANE WILKINS, ET AL,
Request for Commission Investigation Into
CMP's Violation of Homeowner Rights and
the Exposure of the Public Health Risk of
Smart Meters

Docket No. 2010-400

JULIE TUPPER, ET AL
Request for Commission Investigation to
Allow CMP Customers to Retain Existing
Analog Meters

Docket No. 2011-085

WELCH, Chairman; VAFIADES and LITTELL, Commissioners¹

I. SUMMARY

Through this Order, the Commission directs Central Maine Power Company (CMP) to include customer "opt-out" alternatives as part of its advanced metering infrastructure (AMI) or "smart meter" initiative. Specifically, CMP is directed to provide its customers with alternatives to a standard wireless smart meter under the terms and

¹ Chairman Welch did not participate in the above captioned proceedings, did not participate in the Commission's deliberations of these matters, and takes no part in this Order.

conditions specified in this Order and the Part I Order. We issue this decision in two parts. On May 19, 2011, the Commission issued a Part I Order that contained its decision in this proceeding. This Part II Order contains the background, analyses, and reasoning underlying the decision in this proceeding.

II. BACKGROUND

A. Advanced Metering Infrastructure/Smart Meters

After extensive proceedings, the Commission, on February 25, 2010, issued an order approving the installation of AMI technology for CMP, finding that the benefits in terms of customer supply savings and utility operational cost savings are likely to exceed the costs of the investment. *Order Approving Installation of AMI Technology*, Docket No. 2007-215(II) (Feb. 25, 2010). AMI includes smart meters and related systems that allow for automated and remote meter reading, detailed customer usage measurement and data storage, and communications to and from customer meters. AMI provides both utility operational savings (e.g., lower storm restoration costs) and a platform for programs that allow customers to lower their energy costs through more accurate and timely information and pricing programs that better reflect the hourly and seasonal differences in electricity costs (e.g., time-of-use rates).

In a previous order approving the installation of AMI by CMP, subject to the receipt of a Department of Energy (DOE) grant award, the Commission described AMI as:

an important technology that will ultimately reduce utility operational costs, improve customer service and provide customers with necessary tools to use electricity more efficiently and lower their electricity bills, for example, by reducing or shifting usage during high cost periods in response to market price signals. In particular, AMI and associated systems are necessary to provide customers with the option of obtaining rates that are time-differentiated to more closely reflect the actual power costs through the day.

Order Approving Installation of AMI Technology, Docket No. 2007-215(II) at 2 (July 28, 2009). On October 27, 2009, the DOE notified CMP that it had received approximately \$90 million (representing 50% of the cost of CMP's AMI project) in funding under the DOE's Smart Grid Investment Grant Program.

CMP's AMI system communicates and transmits data using a "mesh" network made up of individual customer meters, wireless repeaters and other devices that will be installed throughout CMP's service territory. A radio device in the meters communicates with other meters and network devices within a Neighborhood Area Network. The Neighborhood Area Networks link to the Wide Area Network, which is a high capacity wireless communications network over CMP's entire service area that moves information to and from the Head End System. The Head End System is the "controller" for the AMI System, and coordinates information flows between CMP

customers and CMP's Meter Data Management System. The meters and other devices transmit data by sending radio frequency (RF) signals between various points in the network.

B. Customer Complaints

1. Boxer-Cook Complaint

On October 25, 2010, the Commission received a complaint signed by Elisa Boxer-Cook and 11 other persons against CMP, stating that CMP's acts and practices with respect to the installation of smart meters are unreasonable, inadequate and inconsistent with legislative mandates. Specifically, the Boxer-Cook Complaint cited information and authorities which indicate that the non-ionizing RF radiation that would be emitted by the smart meter mesh network could be a potential cause of cancer and that further research is required. In addition, the Boxer-Cook Complaint stated that there are individuals who suffer from medically confirmed sensitivities to non-ionizing RF radiation and who would be exposed to such radiation involuntarily under CMP's smart meter program.

On October 25, 2010, the Commission issued a Notice of Complaint, notifying CMP of the Boxer-Cook Complaint and directing that a response be filed within 10 days as required by statute, 35-A M.R.S.A. § 1302. On November 3, 2010, CMP filed an initial answer to the Boxer-Cook Complaint in the form of a general denial of the allegations. On November 9, 2010, the Public Advocate filed a letter supporting the Complaint's request for the Commission to open an investigation.

On November 16, 2010, CMP filed a response to the Boxer-Cook Complaint, asking that the Commission dismiss the Complaint on the grounds that it is without merit. In the response, CMP stated that there is no credible support for an assertion that the extremely low power and intermittent RF transmissions emitted by the AMI devices can have any adverse health effects on any customer. Specifically, CMP stated that the use of AMI devices is approved under the standards for RF by the Federal Communications Commission (FCC), the entity charged by Congress with ensuring the safety of transmitting devices, and that the emissions levels are far below those found by the FCC to be safe for RF exposure. Moreover, CMP stated that claims that customers may become sick from radiation in the form of RF emitted from smart meters and associated technologies are not supported by the scientific community.

On December 13, 2010, the Complainants filed a Reply to CMP's Request for Dismissal. The Reply stated that CMP's view of the scientific debate on smart meters is selective, one-sided, misleading and misses the point of the Complaint, which is that CMP's refusal to allow an opt-out option to customers, given the serious and unresolved concerns regarding health risks associated with smart meter installations, is an unreasonable act or practice that the Commission can and should correct.

In response to the Boxer-Cook Complaint, and the subsequently filed Swinbourne Complaint (see section II (B)(2) below), the Commission initiated an

investigation into whether CMP's act or practice of not allowing customers the option to choose not to have a smart meter installed or to otherwise opt-out of the program is unreasonable, insufficient or unjustly discriminatory. *Notice of Investigation*, Docket Nos. 2010-345, 2010-389 (January 7, 2011) (Opt-Out Investigation).

2. Swinbourne Complaint

On December 13, 2010, the Commission received a complaint signed by Teresa Swinbourne and 9 other persons against CMP, stating that CMP's deployment of smart meters is unreasonable, insufficient and discriminatory in that it disregards customer choice, differentiation among the customer base in regards to wireless activities and consumers' right to privacy within their homes. The Swinbourne Complaint stated that the complainants have requested opt-outs from the wireless smart meters and have been informed by CMP that such opt-outs are not an option. The Complaint stated that meter information can be transmitted through dedicated phone lines and therefore the smart grid function does not depend upon wireless service.

On October 25, 2010, the Commission issued a Notice of Complaint, notifying CMP of the Swinbourne Complaint and directing that a response be filed within 10 days as required by statute, 35-A M.R.S.A. § 1302. On December 21, 2010, CMP filed its response to the Swinbourne Complaint, stating that it should be dismissed as without merit. CMP stated that the Swinbourne Complaint raises the same issues as the Boxer-Cook Complaint and that the requested hard wired option fails to meet the Company's operational obligations and requirements established by the Commission and the DOE. On December 22, 2010, the Public Advocate submitted a letter stating that the Commission should investigate the feasibility of a hard wired alternative to CMP's wireless meters.

As mentioned above, the Commission responded to the Swinbourne and Boxer-Cook Complaints by initiating the Opt-Out Investigation.

3. Foley-Ferguson Complaint

On December 17, 2010, the Commission received a complaint signed by Suzanne A. Foley-Ferguson and 10 other persons against CMP, requesting that the Commission open a proceeding to investigate the potential health effects of RF radiation that is emitted from wireless smart meters. Additionally, the complainants asked the Commission to explore alternative modes of data transmission, including hard-wired as opposed to wireless smart meters.

On December 20, 2010, the Commission issued a Notice of Complaint, notifying CMP of the Foley-Ferguson Complaint and directing that a response be filed within 10 days as required by statute, 35-A M.R.S.A. § 1302. On December 23, 2010, CMP filed its Response to the Complaint, denying the allegations and stating that the Complaint raised the same issues as the earlier Boxer-Cook and Swinbourne Complaints. CMP incorporated its response to the earlier Complaints and stated its belief that the Foley-Ferguson Complaint lacked substantive merit and should be dismissed. Additionally, on January 13, 2011, CMP supplemented its December 23,

2010 Response with more detailed information regarding feasibility and cost issues associated with a hard-wired system as opposed to wireless smart meters.

On February 18, 2011, the Commission issued a Notice of Investigation that consolidated the Foley-Ferguson Complaint (as well as the Wilkins Complaint, see section II (B)(4) below) into the Opt-Out Investigation insofar as the Complaint concerned CMP's act and practice of not allowing customers the choice to opt-out of having a wireless smart meter installed.²

4. Wilkins Complaint

On December 22, 2010, the Commission received a complaint signed by Dianne Wilkins and 13 other persons against CMP, asking that the Commission open an investigation into whether CMP has the legal right to (1) enter private property to replace existing meters, and (2) enter private property via RF waves. Additionally, the Wilkins Complaint asked that, if the Commission determines that CMP is within its legal authority to enter private property, it order the installation of non-RF emitting smart meters instead of wireless smart meters.

On December 22, 2010, the Commission issued a Notice of Complaint, notifying CMP of the Wilkins Complaint and directing that a response be filed within 10 days as required by statute, 35-A M.R.S.A. § 1302. On January 3, 2011, CMP filed its Response to the Wilkins Complaint, denying its allegations and stating the Complaint raised the same public health concerns as the earlier complaints. CMP incorporated its response to the Boxer-Cook and Swinbourne Complaints and reiterated its position that the public health concerns in the Wilkins Complaint lacked substantive merit and should be dismissed. With regard to the property rights concerns in the Wilkins Complaint, CMP stated that under its Commission-approved Terms and Conditions, it has the right to select and install the meter of its choice and to have access to a customer's property as a condition of providing electrical service. Accordingly, CMP asserted that the property rights concerns in the Wilkins Complaint should be dismissed as without merit.

On February 18, 2011, the Commission issued a Notice of Investigation that consolidated the Wilkins Complaint into the Opt-Out Investigation insofar as the Complaint concerned CMP's act and practice of not allowing customers the choice to opt-out of having a wireless smart meter installed.³

² In its February 18, 2011 Notice of Investigation, the Commission stated that the consolidated investigation would not include an examination of whether CMP's AMI technology should be changed to an entirely non-wireless alternative.

³ In the February 18, 2011 Notice of Investigation, the Commission dismissed as without merit that portion of the Wilkins Complaint that alleged a violation of customers' property rights, stating that under its filed Terms and Conditions, CMP has the right to select the type of metering equipment and access a customer's premises for purposes of installing or replacing metering equipment.

5. Tupper Complaint

On February 23, 2011, the Commission received a complaint signed by Julie Tupper and 10 other persons against CMP, requesting that the Commission: 1) require CMP to allow its customers to choose to retain their existing analog meters; and 2) investigate the feasibility of “reasonable” smart-meter-free areas around homes of individuals who have been physically impacted by smart meters.

On February 23, 2011, the Commission issued a Notice of Complaint, notifying CMP of the Tupper Complaint and directing that a response be filed within 10 days as required by statute, 35-A M.R.S.A. § 1302. On March 4, 2011, CMP filed its Response to the Complaint, incorporating by reference its responses in Boxer-Cook and Swinbourne Complaints and asking the Commission to deny the request to investigate the alleged health concerns consistent with the Commission’s January 7, 2011 Notice of Investigation. In addition, CMP stated that the opt-out issues raised in the Tupper Complaint are already being addressed in the ongoing investigation and a new investigation is not warranted.

On April 22, 2011, the Commission issued a Notice of Investigation and Consolidation that consolidated the Tupper Complaint into the Opt-Out Investigation insofar as the Complaint concerned CMP’s act and practice of not allowing individual customers the choice to opt-out of having a wireless smart meter installed and to retain their existing meters.⁴

6. Customer Letters

The Commission has received a large number of letters from CMP customers expressing serious concerns regarding the smart meter program. These concerns included potential health and safety impacts, privacy and security risks, and possible interference with wireless devices.

C. Maine Center for Disease Control

At the request of the Public Advocate, the Maine Center for Disease Control (CDC) conducted an examination of the health impacts of smart meters through the review of health studies and assessments by government agencies and some affiliated private and academic organizations. The CDC report concluded:

In conclusion, our review of these agency assessments and studies do not indicate any consistent or convincing

⁴ In its April 22, 2011 Notice of Investigation, the Commission dismissed as without merit that portion of the Tupper Complaint that sought the establishment of smart meter-free areas, stating that the concept would preclude customers in specified geographical areas from obtaining a wireless smart meter which is now the standard meter type in CMP’s service territory.

evidence to support a concern for health effects related to the use of radiofrequency in the range of frequencies and power used by smart meters. They also do not indicate an association of EMF exposure and symptoms that have been described as electromagnetic sensitivity.

Maine CDC Executive Summary of Review of Health Issues Related to Smart Meters, Nov. 8, 2010.

III. OPT-OUT INVESTIGATION

A. Scope of Investigation

In its January 7, 2011 Notice of Investigation (NOI), the Commission stated that the scope of the Opt-Out Investigation would be limited to the issue of whether CMP's position of not providing opt-out alternatives in its smart meter installation program is "unreasonable, insufficient or unjustly discriminatory" in the context of the February 25, 2010 Order Approving Installation of AMI Technology (Docket No. 2007-215(II)). In initiating the Opt-Out Investigation, the Commission specifically stated that it is making no determination on the merits of health, safety, privacy or security concerns with respect to wireless smart meters.

The Commission stated the Opt-Out Investigation would examine technically and economically feasible opt-out alternatives that would allow individual customers to have a choice regarding the installation of wireless meters on their premises. The examination would include, but not be limited to the following:

- The feasibility of options in which communications do not occur through RF (e.g., "hard-wired" options);
- The feasibility of allowing customers to choose to maintain their existing meter;
- The cost (both up front and ongoing) of opt-out options, including whether customers that choose an opt-out should pay any additional costs;
- The impact of opt-out options on the performance of the AMI system and its benefits as outlined in our February 25, 2010 Order (including the impact of opt-out options on CMP's ability to manage load and respond to outages);
- The impact of opt-out options on innovative technologies, such as electric cars and demand response; and
- Any consequences of opt-out options on CMP's DOE funding.

NOI at 7.

B. Intervention

Through procedural orders issued on January 31, 2011, February 28, 2011, and March 23, 2011, the following individuals were granted intervenor status and made parties in the Opt-Out Investigation:

- Elisa Boxer-Cook

- Teresa Swinbourne
- Public Advocate
- Diane Wilkens
- Suzanne Foley-Ferguson
- Averyl Hill
- Amy Blake
- Melissa Hutchison
- Julie Tupper
- Aaron Scifres
- Karen D'Andrea
- Rep. Heather Sirocki
- Rep. Ellie Espling
- Elysia Drew

C. Investigation Process

In response to the NOI, CMP filed its direct case on the opt-out issues on January 18, 2011. Subsequently, technical conferences on the filing were held on January 24, 2011, January 26, 2011 and February 24, 2011. In addition, CMP responded to two sets of oral data requests. The parties and the Commission's Advisory Staff entered into settlement discussions that were ultimately unsuccessful.

After the conclusion of settlement discussions, the parties agreed to a process that would allow for a Commission resolution of the issues in the Opt-Out Investigation in an expedited manner. The parties agreed that the Staff would submit a bench analysis into the record and the parties would then have an opportunity to file written comments on the bench analysis. The parties declined an opportunity for an evidentiary hearing or an oral argument before the Commission. The parties agreed that, for purposes of resolving the issues of the Opt-Out Investigation, the Commission could consider all materials that have been submitted in the consolidated dockets.

IV. STAFF PROPOSED OPT-OUT PROGRAM

A. Staff Bench Analysis

On April 21, 2011, the Advisory Staff submitted for Commission consideration the components of an opt-out program for customers that choose not to have a standard smart meter installed.⁵ Under the opt-out program, any CMP residential or small commercial customer would be provided two opt-out alternatives: 1) an electro-mechanical meter (existing meter option); or 2) a standard smart meter with the internal network interface card (NIC) operating in a receive-only mode (transmitter-off option). Customers electing either opt-out option would be assessed both an initial

⁵ The proposed opt-out program described in the bench analysis was the result of input and information provided by the parties throughout the Opt-Out Investigation process.

charge and a monthly charge intended to cover the incremental system costs CMP would incur to provide and maintain the opt-out options.⁶ The proposed charges would be a \$40.00 initial charge and a \$12.00 monthly charge for the existing meter option and a \$20.00 initial charge and a \$10.50 monthly charge for the transmitter-off option.

Because the smart meter deployment is ongoing throughout CMP's service territory and many customers have already notified CMP of their desire to opt-out,⁷ the bench analysis included two approaches for customer outreach and enrollment. First, CMP would contact by telephone customers who have already indicated that they did not want a standard smart meter. Second, before beginning deployment in a particular area, CMP would notify customers in that area about the available opt-out options and provide 30 days for customers to make an opt-out enrollment decision. Customers who do not elect an opt-out option during the 30-day enrollment period, and subsequently request an opt-out after the enrollment deadline, would be subject to a surcharge of \$25.00 in addition to the applicable opt-out charges.

As part of the program, CMP would be required to develop and implement a communication plan intended to inform customers about the opt-out program during AMI deployment. Under the bench analysis proposal, the costs of the communication plan would not be assessed to opt-out customers, but rather included in the general smart meter project revenue requirements to be assessed to all customers.

Under the proposed opt-out program, customers eligible for the Low-Income Home Energy Assistance Program (LIHEAP) would be eligible for financial assistance. Such customers whose income is equal to or less than 100% of the Federal Poverty Guidelines would receive assistance that covers 50% of both the initial and ongoing monthly and customers whose income is greater than 100% of the Federal Poverty Guidelines would receive assistance that covers 25% of the charges.

Finally, the bench analysis included a deferral and reconciliation mechanism to capture the difference between the assumed opt-out participation level of 9000 customers⁸ and actual participation levels. The mechanism was proposed

⁶ The proposed charges in the bench analysis were based on the incremental costs associated with the options that were initially estimated by CMP in ODR-02-08 submitted on March 10, 2011. Staff reduced or eliminated certain costs it considered to be unsubstantiated, not incremental, or unduly speculative. The details of these adjustments were provided in Attachment 1 to the bench analysis.

⁷ Upon request, CMP agreed to allow customers to maintain their existing meters pending the outcome of the Commission's Opt-Out Investigation.

⁸ As noted in the bench analysis, the estimate of 9,000 customers participating in an opt-out program was based on 1.5% of the customer population that had already asked CMP not to install a smart meter. As of January 7, 2011, after 100,000 smart meters had been installed, 1.5% of customers requested that a smart meter not be installed. With approximately 609,000 active customer meters across CMP territory, if

because the Staff viewed actual participation rates to be very difficult to predict and participation rates that are higher or lower than assumed levels could result in CMP either over-recovering or under-recovering incremental opt-out program costs.

B. Comments on Bench Analysis

The following parties filed comments on the bench analysis: CMP, the Public Advocate, Ms. Boxer-Cook, Ms. Foley-Ferguson, Ms. Swinbourne, Ms. Wilkins, Ms. D'Andrea, Ms. Tupper and Rep. Sirocki.

1. Central Maine Power

CMP urged the Commission to reject the opt-out program presented in the bench analysis on the grounds that there is no basis to conclude that the smart meter project without a customer opt-out provision is unreasonable, insufficient or unjustly discriminatory. CMP argued that any opt-out option is inconsistent with the required AMI capabilities specified in the Commission's February 25, 2010 Order in the AMI proceeding (Docket No. 2007-215(II)) and that there is no credible scientific evidence to warrant any opt-out option. In the event the Commission decides to adopt an opt-out program, CMP argued that it should not include an existing meter alternative, because multiple options will create confusion and complicate administrative and operational impacts of the program. Moreover, CMP stated that the transmitter-off option provides substantially greater functionality that will streamline and standardize the load settlement process, support participation in demand response and time of use programs, simplify testing and inventory management and avoid separate meter troubleshooting tools and processes.

In addition, CMP opposed recovery of the costs of the communication plan and AMI vendor development costs from the general body of ratepayers and asks that the communication plan sunset once the initial AMI deployment is complete in 2012.

Finally, CMP asked that it be allowed to recover any major expenses related to the opt-out program that may not have been foreseen in this investigation. CMP points out that it developed the incremental costs of an opt-out program over what CMP calls an extremely accelerated schedule and, accordingly, it should be allowed recovery of legitimate and prudently incurred costs of the opt-out program.

2. Intervenors

The Public Advocate and other intervenors commented generally in support of the opt-out program described in the bench analysis as a reasonable approach that is in the overall public interest. These parties noted that an opt-out option

1.5% of customers opt-out of the program, this would result in approximately 9,000 opt-outs.

is justified by the large number of customer complaints submitted to the Commission and the very strong concern expressed by customers over a requirement that, in order to receive electric service from CMP, they must have a wireless smart meter installed on their premises. The Public Advocate and intervenors stated that to address the health, privacy and other concerns, customers must have the option to maintain their existing meters. They note that the transmitter-off option still involves a wireless meter that receives signals and collects interval data that can be subject to hacking.

Ms. Foley-Ferguson, Ms. D'Andrea and Ms. Tupper commented that customers should not be charged to opt-out of the wireless smart meter program, because no one should have to compromise when it comes to their health and privacy concerns in their own homes and the additional opt-out costs would be small if charged to all ratepayers. Ms. Foley-Ferguson also argued that the estimated incremental cost of customer opt-outs is over-estimated because the number of assumed additional "repeaters" to make up for gaps from fewer wireless meters is extremely speculative and that customers should not have to pay more because their premises cannot be used to transmit other customers usage data. Ms. Foley-Ferguson also commented that, in light of the fact that it is likely that most opt-out customers will choose the existing meter option, there would be no benefit to providing the transmitter-off option. Ms. Foley-Ferguson noted that this option would have a significant incremental cost to CMP ratepayers in that the "transmitter-off" meter would have to be designed by the manufacturer. In the event CMP proceeds with the transmitter-off option, Ms. Foley-Ferguson stated that CMP should have an ownership interest in the newly developed design.

With respect to the low-income customers, the Public Advocate suggests that a more realistic option would be for LIHEAP customers to pay an up-front charge to opt-out, but the monthly charges should be completely eliminated.

V. DISCUSSION

As discussed below, we conclude that CMP's failure to provide its customers with the ability to choose an alternative to a wireless smart meter as part of its AMI initiative is an unreasonable utility act and practice. Accordingly, we direct CMP to provide its customers with an option to opt-out of the installation of a standard wireless smart meter under the terms and conditions specified in this Order and our Part I Order.⁹

A. Smart Meter Opt-Out

At the outset, we affirm our support for CMP's AMI initiative and smart grid technology more generally. This technology will not only allow access to usage information and pricing programs that will provide individual customers with

⁹ In the event the Commission finds a utility act or practice is unjust, unreasonable, insufficient or unjustly discriminatory, it is authorized by statute to order the utility to establish an alternative act or practice that it finds to be just and reasonable. 35-A M.R.S.A. § 1306(2).

opportunities to lower their electricity bills, but will also result in more efficient electric grid and utility operational improvements for the benefit of all electricity users. We note that CMP has responded reasonably and prudently to the State's policy regarding smart grid technology, 35-A M.R.S.A. § 3143, and to the Commission's direction to pursue new technology that will enhance the efficiency of its distribution and metering system. CMP successfully competed nationally and received a DOE smart grid investment grant for half the cost of its AMI project. With federal support to implement national and State smart grid objectives, we found CMP's AMI project to be cost-effective and technically sound. *Order Approving Installation of AMI Technology*, Docket No. 2007-215(II) (Feb. 25, 2010).

However, concurrent with the start of CMP's smart meter installation process in the fall 2010, we began to receive numerous letters and e-mails from customers expressing serious concerns regarding wireless smart meters, including potential health and safety impacts, privacy and security risks, and possible interference with wireless devices. These communications have continued throughout CMP's deployment process and our Opt-Out Investigation. In addition, we have received seven ten-person complaints regarding CMP's smart meter program and over a thousand customers have asked CMP not to install a smart meter on their premises.

In light of the magnitude of concerns among a significant portion of its customers, CMP's response that those concerns lack of credible scientific evidence misses the point. CMP is a public utility that provides a monopoly service. Customers that are dissatisfied with CMP service cannot obtain electricity transmission and distribution service from another provider. As such, responsiveness to customer concerns and customer acceptance of the terms and conditions of service are important considerations with respect of public utility service. Under the circumstances presented in this case, it is clearly an unreasonable act and practice for a utility to ignore the concerns of a significant number of its customers and refuse to permit a smart meter opt-out option if doing so is technically and economically feasible and those customers assume and bear the additional costs. The Staff bench analysis and information in the record in this proceeding demonstrate that a smart meter opt-out in the context of CMP's AMI program is technically and economically feasible. We, therefore, find that CMP's AMI initiative, without an opt-out alternative, is an unreasonable utility act and practice and we direct CMP to provide customers with opt-out alternatives as specified in this Order.

B. Opt-Out Alternatives and Pricing

We find that the set of opt-out alternatives and pricing as presented in the Staff bench analysis to be supported in the record, has a reasonable cost basis and is in the public interest. Thus, CMP is directed to include in its terms and conditions the following opt-out alternatives and pricing:¹⁰

¹⁰ In addition to the above options, customers will continue to have the existing option to relocate a smart meter to a different point on their home, business or other location on their property. Under this option, customers would pay the cost of relocating the meter, but would not incur any additional charges associated with an opt-out option.

<u>Option</u>	<u>Initial Charge</u>	<u>Monthly Charge</u>
Existing Meter Option	\$40.00	\$12.00
Transmitter-Off Option	\$20.00	\$10.50

In addition, any customer who does not elect an opt-out option during the 30-day enrollment period (see section V (D) below), and subsequently requests an opt-out after the enrollment deadline, would be subject to a surcharge of \$25.00 in addition to the applicable opt-out charges.

We disagree with CMP's argument that a smart meter opt-out program should not include an option for an electro-mechanical meter. In our view, providing two opt-out options will not be overly confusing to customers and, based on the smart meter complaints and customer letters, the vast majority of customers that have concerns regarding smart meters desire to maintain an existing meter. It would be of little purpose to provide an opt-out alternative in response to customer concerns when that alternative is not acceptable to most of the customers as a means to address those concerns.¹¹ Moreover, although we agree with CMP that the existing meter option does not provide the functionality required by our February 25, 2010 AMI approval order (Docket No. 2007-215(II)), much of that functionality would benefit the individual customer. Therefore, a customer's choice to opt-out and keep the existing meter will also be a choice to forego the benefits of the AMI system.

We also do not agree there would be no benefit to offering the transmitter-off option as a second alternative. Although it may be true that most opt-out customers (at least in the near term) are likely to choose the existing meter option, we believe that there is value to providing an alternative that will allow customers the ability to participate in some of the benefits of the AMI system, including dynamic pricing programs.¹² We also believe there will ultimately be value in an AMI system in which CMP can remotely turn the smart meter transmitter on or off depending on changes in customer desires or the occupancy of the premises. Because of its value to the system more generally, we conclude (contrary to CMP's position) that the incremental costs of establishing the transmitter-off option (such as the design of the meter and development of the necessary firmware)¹³ should be recovered from all ratepayers as part of the overall AMI revenue requirement, as proposed in the Staff bench analysis.

¹¹ We expect CMP to take reasonable actions to maintain the equipment and resources necessary to support both opt-out options.

¹² The transmitter-off option meter will measure hourly usage, thus enabling a customer to participate in dynamic pricing programs (such as time-of-use pricing).

¹³ In her comments, Ms. Foley-Ferguson stated that, because CMP is paying for the development of new technology, it should receive some interest or benefit from that development. Ms Foley-Ferguson raises a valid point in this respect. We expect CMP

Some intervenors argued that the incremental costs of providing the opt-out alternatives should not be charged directly to the opt-out customers, but paid for by all of CMP's ratepayers. We disagree with this position. The AMI smart meters are now CMP's standard meter. It has been the practice in Maine that customers that desire alternatives to the utility's standard meters pay the incremental costs of the alternative metering. See, e.g., Chapter 322, § 5(A)(2). We see no reason to change this practice in the context of CMP's smart meter program. As a general utility ratemaking principle, customers that request non-standard services should pay the incremental costs of those services.¹⁴ In our view, it would be inconsistent with ratemaking principles and basically inequitable for CMP to recover the costs caused by an individual customer's decision to opt-out of receiving a standard wireless meter from its general body of ratepayers.

Finally, as noted above, Ms. Foley-Ferguson argued that the estimated cost of the incremental mesh infrastructure is extremely speculative and should not be charged to opt-out customers. Although we agree that these estimated costs cannot be known with a large degree of certainty, such lack of certainty in estimated costs is not unusual in utility ratemaking. We conclude that the estimated costs of the additional infrastructure caused by customer opt-outs as presented in the Staff bench analysis is reasonable and supported by the record in this proceeding, and should be included in the determination of the opt-out charges.

C. Low-Income Assistance

We adopt, as part of the opt-out program, the low-income assistance proposal contained in the Staff bench analysis. Accordingly, customers that are eligible for LIHEAP will qualify for low-income assistance as follows: customers whose income is equal to less than 100% of the Federal Poverty Guidelines will receive a 50% reduction in the initial and ongoing opt-out fees; and customers whose income is greater than 100% of the Federal Poverty Guidelines will receive a 25% reduction in the initial and ongoing opt-out fees. The program administration for this assistance will be integrated with CMP's current Electric Lifeline Program (ELP) and funding would be provided from CMP's distribution rates through a separate, reconcilable mechanism that would be reviewed and adjusted by the Commission on an annual basis concurrent with the review and reconciliation of ELP funding.

We find this low-income assistance plan to be balanced and in the overall public interest. Accordingly, we decline to adopt the Public Advocate's alternative proposal that LIHEAP customers pay only the upfront charge with the monthly charges eliminated.

to take steps to secure any benefits for its ratepayers from the development of the transmitter-off option that may be reasonable and consistent with industry practice.

¹⁴ The primary incremental costs associated with the opt-out options are for meter readers and additional network devices (e.g., repeaters) needed to avoid gaps in the mesh network that would otherwise exist due to there being fewer standard smart meters receiving and transmitting meter data.

D. Enrollment Process

We adopt the opt-out enrollment process described in the Staff bench analysis. Under this process, CMP will contact by telephone customers who have already indicated that they do not want to have a smart meter installed and inform those customers of the opt-out options pursuant to the communications plan (discussed in section V (E) below). In addition, before beginning deployment in a particular area, CMP will notify customers in that area about the AMI program and the opt-out alternatives. Those customers will then have 30 days from when the notice is sent to make an opt-out enrollment decision. This approach will make the deployment process more efficient and less costly, because CMP will know, with a reasonable degree of certainty, which customers have decided to opt-out before deployment in the area starts. If a customer has been notified in this manner and does not request an opt-out within the 30-day enrollment period, and later requests to opt-out, that customer will be charged an additional \$25.00. This charge is intended to provide customers with an incentive to make the opt-out choice within the enrollment period and to cover some of the costs of changing out the meter after deployment in the area. CMP may waive the surcharge if it determines there is a sufficient reason for the customer's failure to notify CMP within the 30-day period.

E. Communication Plan

As part of the opt-out process, CMP is directed to develop and implement a communication plan consistent with that described in the Staff's bench analysis. This communication plan should inform customers about CMP's AMI initiative and opt-out alternatives and should be available on CMP's website. Specifically, the plan should use the term "wireless" in describing the standard smart meters and provide the following information:

- description of the smart meter program, including smart meter capabilities and communication mode;
- potential customer benefits of the smart meter program;
- the opt-out options available;
- the capabilities and communication modes of the opt-out options;
- the process to select an option;
- the opt-out option charges; and
- the existing meter relocation alternative.

In our view, CMP could have been more proactive in its prior efforts to inform customers of the smart meter program and its potential customer benefits. The development of the smart meter communication plan as required by this Order should help improve CMP's efforts to inform its customers of all aspects of the smart meter program.

The communications plan will provide useful and important information to all of CMP's customers and is important for the success of the AMI program. We, therefore, agree with Staff that the costs of developing and implementing the communication plan should be recovered from all ratepayers as part of CMP's overall

AMI revenue requirement. Accordingly, we reject CMP's argument that the costs of the communication plan be recovered through opt-out charges. We also reject CMP's request that we specify in this Order that the communication plan requirements will end with the completion of the initial AMI deployment in 2012. CMP's communication plan implementation should continue until otherwise directed by the Commission.

F. Opt-Out Metering

Customers that choose either of the opt-out alternatives (i.e., existing meter option or transmitter-off option) will have their meters read manually by CMP (in contrast to the standard smart meter which will be read remotely), and CMP will conduct these manual meter reads on at least a bi-monthly basis. These bi-monthly meter reads will allow CMP to comply with ISO-NE rules regarding load data reporting requirements.

To allow CMP to implement the opt-out program with bi-monthly meter reads, we hereby waive Chapter 815, section 8(L) of our rules so that CMP will not be required to make monthly meter reads for opt-out customers. We also waive the Chapter 815, section 10(C) prohibition against disconnecting an opt-out customer when the latest bill issued was based on an estimated read, as long as the customer's meter had been read consistent with the bi-monthly meter reading requirement.¹⁵ Furthermore, the six scheduled estimated meter readings that are attributable to opt-out customers would be excluded from CMP's ARP Service Quality Indicators and performance will be measured against a requirement of six actual, on-schedule meter readings per year.

G. Opt-Out Cost Deferral and Reconciliation Process

We adopt the cost deferral and reconciliation process recommended in the Staff's bench analysis. The opt-out charges specified in this Order reflect an assumed level of 9,000 customers participating in the opt-out program (total over both options). Actual participation rates, however, are very difficult to predict and participation rates that are higher or lower than assumed levels could result in CMP either significantly over-recovering or under-recovering incremental opt-out program costs. This result occurs because some of the costs to provide the opt-out options are fixed in nature or do not vary in direct proportion to participation levels (e.g., costs for meter reading).

We, therefore, adopt an opt-out cost recovery mechanism under which there will be a deferral and subsequent reconciliation of costs to capture the difference between assumed and actual participation levels. CMP is directed to track and annually report actual program participation information. Then, when CMP's distribution rates are re-examined after the term of its current alternative rate plan (ARP), the under- or over-recovery of incremental costs due to any difference between assumed and actual participation will be addressed and rates will be adjusted prospectively as determined to be just and reasonable by the Commission. Specifically, the deferral and reconciliation will be limited only to differences in participation levels, and will not include true-ups for

¹⁵ Section 16 of Chapter 815 provides that the Commission may, for good cause, waive any requirement of this rule that is not required by statute.

other items, including costs that turn out to be higher or lower than that assumed in determining the opt-out charges. We reject CMP's proposal that it be allowed to defer for future recovery incremental costs of the opt-out program that may have been unexpected as CMP had in effect many months to develop details costs for both opt out options which were detailed, well documented and comprehensive. Any such costs (as with any unforeseen costs) will be subject to the terms of CMP's ARP.

Accordingly, CMP is directed to implement a smart meter opt-out program as specified in the Part I and Part II issued in this proceeding.

Dated at Hallowell, Maine, this 22nd day of June, 2011.

BY ORDER OF THE COMMISSION

Karen Geraghty
Karen Geraghty
Administrative Director

COMMISSIONERS VOTING FOR: Vafiades
Littell

NOTICE OF RIGHTS TO REVIEW OR APPEAL

5 M.R.S.A. § 9061 requires the Public Utilities Commission to give each party to an adjudicatory proceeding written notice of the party's rights to review or appeal of its decision made at the conclusion of the adjudicatory proceeding. The methods of review or appeal of PUC decisions at the conclusion of an adjudicatory proceeding are as follows:

1. Reconsideration of the Commission's Order may be requested under Section 1004 of the Commission's Rules of Practice and Procedure (65-407 C.M.R.110) within **20** days of the date of the Order by filing a petition with the Commission stating the grounds upon which reconsideration is sought.
2. Appeal of a final decision of the Commission may be taken to the Law Court by filing, within **21 days** of the date of the Order, a Notice of Appeal with the Administrative Director of the Commission, pursuant to 35-A M.R.S.A. § 1320(1)-(4) and the Maine Rules of Appellate Procedure.
3. Additional court review of constitutional issues or issues involving the justness or reasonableness of rates may be had by the filing of an appeal with the Law Court, pursuant to 35-A M.R.S.A. § 1320(5).

Note: The attachment of this Notice to a document does not indicate the Commission's view that the particular document may be subject to review or appeal. Similarly, the failure of the Commission to attach a copy of this Notice to a document does not indicate the Commission's view that the document is not subject to review or appeal.